

CHROMOSOMAL TYPIFICATION OF *SISYRINCHIUM BERMUDIANA* L. (IRIDACEAE)¹

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Literature reports for the chromosome number of *Sisyrinchium bermudiana* L. are $2n = 96$ (Oliver & Lewis, 1962), $2n = 82, 84, 88$ and 90 (Ingram, 1967), $2n = 80$ and 96 (Ingram, 1968) and $2n = 32, 64$ and 96 (Mosquin, 1970). Geographical data from voucher specimens which produced these numbers are from North America and Europe. While variation in chromosome number of a plant species is not uncommon, these data are perplexing in the light of the statements by Hemsley (1884), Bicknell (1896), and Britton (1918) that the name *S. bermudiana* L. should be applied only to the Bermudas. The latter author believed the species to be endemic to those islands. Ward's (1968) thorough nomenclatural study revealed that *S. bermudiana* L. is applied only to the Bermuda population and then listed five names of northeastern North American species (*S. angustifolium* Mill, *S. mucronatum* Michx., *S. arenicola* Bickn., *S. montanum* Greene, and *S. atlanticum* Bickn.) which were morphologically differentiated from each other, as well as *S. bermudiana* L.

It therefore becomes necessary to determine the chromosome number of *Sisyrinchium bermudiana* L. in its probable singular location: Bermuda. Flower buds from several populations were sampled and cytologically examined using an aceto-orcein technique described elsewhere (Hill & Rogers, 1970). The preparations were studied under oil at $1000\times$ magnification using a Zeiss phase contrast microscope. Camera lucida drawings have been attached to the herbarium sheets of voucher specimens deposited in the herbarium of Bridgewater College (BDWR). The chromosome number of all populations was $n = 32$.

Sisyrinchium bermudiana in Bermuda easily shows morphological differentiation from the eastern North American species discussed by Ward (1968). The taxon has these distinguishing characteristics: a large flower (17–20 mm in diameter), a stout stem with wings 2–3 mm wide, leaves 5–7 mm wide and as stout as the stem,

¹This paper represents contribution number 894 from the Bermuda Biological Station for Research, Ferry Reach 1–15 West, Bermuda.

and a prominent node which is at the base of both foliaceous and spathodal bracts. A re-examination of the vouchers cited by Oliver and Lewis (1962) and Mosquin (1970) is now in progress as part of a continuing study of chromosome numbers of eastern North American taxa of *Sisyrinchium*.

This study was supported by NSF grant DEB-8008808 through the Bermuda Biological Station for Research and NSF grant TFI-8016238.

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